

CLAIMS

1 1. A method of building a database in an exchange system to enable the lo-
2 cation of distributed health care information, the method comprising the steps of:

3 receiving metadata including organization information, patient demo-
4 graphic data, and information locator data;

5 determining a universal person object corresponding to the demo-
6 graphic data;

7 updating the universal person object in accordance with the metadata;

8 and

9 storing the information locator data so that the information locator data
10 is associated with the universal person object.

1 2. The method of claim 1 wherein the determining step further comprises the
2 steps of:

3 searching the database for an existing universal person object corre-
4 sponding to the patient demographic data and determining that there is no
5 existing universal person object corresponding to the patient demographic
6 data; and

7 creating the universal person object corresponding to the patient demo-
8 graphic data.

1 3. The method of claim 1 wherein the determining step further comprises the
2 step of searching the database and locating the universal person object correspond-
3 ing to the patient demographic data.

1 4. The method of claim 1 further comprising the step of, after the updating
2 step, forwarding the universal person object to a parent server.

1 5. The method of claim 2 further comprising the step of, after the updating
2 step, forwarding the universal person object to a parent server.

1 6. The method of claim 3 further comprising the step of, after the updating
2 step, forwarding the universal person object to a parent server.

1 7. A method of locating particular information pertaining to a person wherein
2 the particular information is stored among distributed information, the method com-
3 prising the steps of:
4 receiving a query from a provider;

5 correlating the query against at least a primary database in at least a
6 primary domain to locate a universal person object corresponding to the per-
7 son;
8 retrieving locator data associated with the universal person object;
9 filtering the locator data according to one or more policies; and
10 presenting the locator data to the provider.

1 8. The method of claim 7 further comprising the steps of:
2 determining if a pointer exists in the primary database, the pointer indi-
3 cating a remote database in a remote domain; and
4 if the pointer exists, correlating the query against the remote database
5 in the remote domain.

1 9. The method of claim 7 further comprising the steps of:
2 presenting correlation results to the provider; and
3 receiving constraints and parameters from the provider, the constraints
4 and parameters for directing the retrieving of the locator data.

1 10. The method of claim 8 further comprising the steps of:
2 presenting correlation results to the provider; and

3 receiving constraints and parameters from the provider, the constraints
4 and parameters for directing the retrieving of the locator data.

1 11. In a network including distributed information, a method of viewing a rec-
2 ord for a particular person from within the information, the method comprising the
3 steps of:

4 sending a query from a provider application to a primary domain server;
5 correlating the query by accessing at least a primary database in at
6 least a primary domain to locate a universal person object corresponding to
7 the particular person;
8 retrieving locator data associated with the universal person object;
9 filtering the locator data according to one or more policies;
10 presenting the locator data to the provider application;
11 selecting, at the provider application, one or more records from a re-
12 mote data system; and
13 accessing the one or more records from the remote data system by the
14 provider application.

1 12. The method of claim 11 further comprising the steps of:
2 determining if a pointer exists in the primary database, the pointer indi-
3 cating a remote database in a remote domain; and

4 if the pointer exists, correlating the query by accessing the remote da-
5 tabase in the remote domain.

1 13. The method of claim 11 further comprising the steps of:
2 presenting correlation results to the provider application; and
3 setting constraints and parameters at the provider application, the con-
4 straints and parameters for directing the retrieving of the locator data.

1 14. The method of claim 12 further comprising the steps of:
2 presenting correlation results to the provider application; and
3 setting constraints and parameters at the provider application, the con-
4 straints and parameters for directing the retrieving of the locator data.

1 15. A computer program product for enabling a server to build a database in
2 an exchange system to enable the location of distributed information, the computer
3 program product including a computer program comprising:
4 instructions for creating universal person objects;
5 instructions for receiving metadata including organization information,
6 demographic data, and information locator data;
7 instructions for searching the database for universal person objects;

8 instructions for updating a universal person object corresponding to the
9 demographic data in accordance with the metadata; and
10 instructions for storing the information locator data so that the informa-
11 tion locator data is associated with the universal person object corresponding
12 to the demographic data.

1 16. The computer program product of claim 15 wherein the computer program
2 further comprises instructions for forwarding the universal person objects to a parent
3 server.

1 17. A computer program product for enabling the locating particular informa-
2 tion pertaining to a person wherein the particular information is stored among distrib-
3 uted information, the computer program product including a computer program
4 comprising:

5 instructions for receiving a query from a provider;
6 instructions for correlating the query against at least a primary database
7 at least a primary domain to locate a universal person object corresponding to
8 the person;
9 instructions for retrieving locator data associated with the universal per-
10 son object;

11 instructions for filtering the locator data according to one or more poli-
12 cies; and
13 instructions for presenting the locator data to the provider.

1 18. The computer program product of claim 17 wherein the computer program
2 further comprises:

3 instructions for determining if a pointer exists in the primary database,
4 the pointer indicating a remote database in a remote domain; and
5 instructions for correlating the query against the remote database in the
6 remote domain.

1 19. The computer program product of claim 17 wherein the computer program
2 further comprises:

3 instructions for presenting correlation results to the provider; and
4 instructions for receiving constraints and parameters from the provider,
5 the constraints and parameters for directing the retrieving of the locator data.

1 20. The computer program product of claim 18 wherein the computer program
2 further comprises:

3 instructions for presenting correlation results to the provider; and

4 instructions for receiving constraints and parameters from the provider,
5 the constraints and parameters for directing the retrieving of the locator data.

1 21. Apparatus for building a database to enable the location of distributed in-
2 formation, the apparatus comprising:

3 means for creating universal person objects;
4 means for receiving metadata including organization information,
5 demographic data, and information locator data;
6 means for searching the database for universal person objects;
7 means for updating a universal person object corresponding to the
8 demographic data in accordance with the metadata; and
9 means for storing the information locator data so that the information
10 locator data is associated with the universal person object corresponding to
11 the demographic data.

1 22. Apparatus for locating particular information pertaining to a person
2 wherein the particular information is stored among distributed information, the appa-
3 ratus comprising:
4 means for receiving a query from a provider;

5 means for correlating the query against at least a primary database at
6 least a primary domain to locate a universal person object corresponding to
7 the person;
8 means for retrieving locator data associated with the universal person
9 object;
10 means for filtering the locator data according to one or more policies;
11 and
12 means for presenting the locator data to the provider.

1 23. A network including distributed health care information comprising:
2 a provider application operable to issue queries; and
3 at least a first server connected to the provider application, and con-
4 taining a primary correlation system connected to a primary database of uni-
5 versal person objects, the server operable to receive the queries, correlate the
6 queries against the database, and retrieve locator data, the locator data indi-
7 cating the location of one or more specific records from within the distributed
8 provider information.

1 24. The network of claim 23 further comprising a second server connected to
2 the first server, and including a remote correlation system connected to a remote
3 database of universal person objects.

1 25. The network of claim 23 further comprising a remote data system con-
2 taining at least a portion of the distributed health care information, the remote data
3 system operable to connect to the provider application, format, and supply one or
4 more of the specific records over the network.

1 26. The network of claim 24 further comprising a remote data system con-
2 taining at least a portion of the distributed health care information, the remote data
3 system operable to connect to the provider application, format, and supply one or
4 more of the specific records over the network.

1 27. A programmed computer system operable to build a database in an ex-
2 change system to enable the location of distributed health care information by per-
3 forming the steps of:

4 receiving metadata including organization information, demographic
5 data, and information locator data;

6 determining a universal person object corresponding to the demo-
7 graphic data;

8 updating the universal person object in accordance with the metadata;

9 and

10 storing the information locator data so that the information locator data
11 is associated with the universal person object.

1 28. The system of claim 27 wherein the determining step further comprises
2 the steps of:

3 searching the database for an existing universal person object corre-
4 sponding to the demographic data and determining that there is no existing
5 universal person object corresponding to the demographic data; and
6 creating the universal person object corresponding to the demographic
7 data.

1 29. The system of claim 27 wherein the determining step further comprises

2 the step of searching the database and locating the universal person object corre-
3 sponding to the demographic data.

1 30. The system of claim 27 further enabled to perform the step of forwarding
2 the universal person object to a parent server.

1 31. The system of claim 28 further enabled to perform the step of forwarding
2 the universal person object to a parent server.

1 32. The system of claim 29 further enabled to perform the step of forwarding
2 the universal person object to a parent server.

3 33. A programmed computer system which is operable to locate particular
4 health care information pertaining to a person wherein the particular health care in-
5 formation is stored among distributed provider's by performing the steps of:

6 receiving a query from a provider;
7 correlating the query against at least a primary database at least a pri-
8 mary domain to locate a universal person object corresponding to the person;
9 retrieving locator data associated with the universal person object;
10 filtering the locator data according to one or more policies; and
11 presenting the locator data to the provider.

1 34. The system of claim 33 further enabled to perform the steps of:
2 determining if a pointer exists in the primary database, the pointer indi-
3 cating a remote database in a remote domain; and

4 if the pointer exists, correlating the query against the remote database
5 in the remote domain.

1 35. The system of claim 33 further enabled to perform the steps of:
2 presenting correlation results to the provider; and
3 receiving constraints and parameters from the provider, the constraints
4 and parameters for directing the retrieving of the locator data.

1 36. The system of claim 34 further enabled to perform the steps of:
2 presenting correlation results to the provider; and
3 receiving constraints and parameters from the provider, the constraints
4 and parameters for directing the retrieving of the locator data.

1 37. Apparatus for enabling the location of records from among distributed in-
2 formation, the apparatus comprising:
3 an information locator service for storing and accessing information lo-
4 cator data;
5 a database of universal person objects, each universal person object
6 corresponding to a person and associated with information locator data in the
7 information locator service; and

8 a correlation system connected to the database for correlating demo-
9 graphic information against the database to locate a particular universal per-
10 son object.

1 38. The apparatus of claim 37 further comprising a person identification serv-
2 ice connected to the correlation system for providing a standard interface for receiv-
3 ing the demographic information.

1 39. The apparatus of claim 37 further comprising a resource access descrip-
2 tion service for maintaining and applying policy information to information locator
3 data.

1 40. The apparatus of claim 38 further comprising a resource access descrip-
2 tion service for maintaining and applying policy information to information locator
3 data.

1 41. A memory system encoded with a data structure for defining a universal
2 person object for use in correlating queries for records, the data structure comprising:

3 a person class including references to person specific data, the person
4 class further being operable to track historical instances of the person specific
5 data;
6 a person identifier class associated the person class, the person identi-
7 fier class including references to one or more person identifiers; and
8 a domain identifier class associated with the person class for identifying
9 one or more systems from which the one or more person identifiers have been
10 received.

2025 RELEASE UNDER E.O. 14176